

REVISIONS TO CLAIMS

1. (currently amended) A method for creating an electronic communication, comprising executing the following operations in at least one data processing device:
 - first retrieving data from at least one type of data source into a first electronic format using at least one first annotated schema;
 - second retrieving data from the first electronic format into a second electronic format using at least one second annotated schema,
 - further comprising using a GUI tool to create internal representations relating the second format to the at least one type of data source
 - wherein the GUI tool
 - can systematically organize a template from combining and merging multiple tables
 - is adapted to enable operations, the operations including
 - accepting single annotations for certain repeatable constructs in the template, and
 - replicating the repeatable constructs a fixed number of times for customized annotation.
2. (original) The method of claim 1, wherein the first electronic format comprises at least one XML document.
3. (original) The method of claim 1, wherein the first electronic format comprises at least one value pair.

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4. (original) The method of claim 1, wherein the first and second retrieving are done using a same type of software engine applied first to the at least one type of data source and then to the first electronic format.

5. (original) The method of claim 1, wherein the second electronic format belongs to the category of XML/EDI electronic document specification languages.

6. (original) The method of claim 1, wherein the first annotated schema comprises at least one first annotated DTD and the second annotated schema comprises at least one second annotated DTD.

7. (original) The method of claim 6, wherein the at least one second annotated schema comprises

- a single DTD for all possible document types within a single industrial electronic document specification language; and
- annotations for retrieving specifications for a desired document type from the first electronic format.

8. (original) The method of claim 7, wherein the first and second retrieving are done using a same type of software engine applied first to the at least one type of data source and then to the first electronic format.

9. (original) The method of claim 1, wherein the at least one type of data source comprises heterogeneous data bases.

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10-12 (cancelled)

13. (currently amended) At least one data processing device comprising:

- at least one memory for storing code and data;
- at least one processor for performing the following operations using the least one memory
- first retrieving data from at least one type of data source into a first electronic format using at least one first annotated schema;
- second retrieving data from the first electronic format into a second electronic format using at least one second annotated schema; and
- creating an electronic communication based on the at least one second annotated schema

further comprising using a GUI tool to create internal representations relating the second format to the at least one type of data source;

wherein the GUI tool

- can systematically organize a template from combining and merging multiple tables;
- is adapted to enable operations, the operations including:
 - accepting single annotations for certain repeatable constructs in the template, and
 - replicating the repeatable constructs a fixed number of times for customized annotation.

14. (original) The device of claim 13, wherein the first electronic format comprises at least one XML document.

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15. (original) The device of claim 13, wherein the first electronic format comprises at least one value pair.

16. (original) The device of claim 13, wherein the first and second retrieving are done using a same type of software engine applied first to the at least one type of data source and then to the first electronic format.

17. (original) The device of claim 13, wherein the second electronic format belongs to the category of XML/EDI electronic document specification languages.

18. (original) The device of claim 13, wherein the first annotated schema comprises at least one first annotated DTD and the second annotated schema comprises at least one second annotated DTD.

19. (original) The device of claim 18, wherein the at least one second annotated schema comprises

- a single DTD for all possible document types within a single industrial electronic document specification language; and
- annotations for retrieving specifications for a desired document type from the first electronic format.

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20. (original) The device of claim 19, wherein the first and second retrieving are done using a same type of software engine applied first to the data sources and then to the first electronic format.

21. (previously presented) The device of claim 13, wherein the at least one type of data source comprises heterogeneous relational databases.

22 -24 (cancelled)

25. (original) A medium readable by a data processing device and embodying code for performing the following operations:

- first retrieving data from at least one type of data source into a first electronic format using at least one first annotated schema;
- second retrieving data from the first electronic format into a second electronic format using at least one second annotated schema; and
- creating an electronic communication based on the at least one second annotated schema

further comprising using a GUI tool to create internal representations relating the second format to the at least one type of data source, wherein the GUI tool

- can systematically organize a template from combining and merging multiple tables,
- is adapted to enable operations, the operation including
 - accepting single annotations for certain repeatable constructs in the template, and
 - replicatinge the repeatable constructs a fixed number of times for customized annotation.

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26. (original) The medium of claim 25, wherein the first electronic format comprises at least one XML document.

27. (original) The medium of claim 25, wherein the first electronic format comprises at least one value pair.

28. (original) The medium of claim 25, wherein the first and second retrieving are done using a same type of software engine applied first to the at least one type of data source and then to the first electronic format.

29. (original) The medium of claim 25, wherein the second electronic format belongs to the category of XML/EDI electronic document specification languages.

30. (original) The medium of claim 25, wherein the first annotated schema comprises at least one first annotated DTD and the second annotated schema comprises at least one second annotated DTD.

31. (original) The medium of claim 30, wherein the at least one second annotated schema comprises

- a single DTD for all possible document types within a single industrial electronic document specification language; and

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- annotations for retrieving specifications for a desired document type from the first electronic format.

32. (original) The medium of claim 31, wherein the first and second retrieving are done using a same type of software engine applied first to the at least one type of data source and then to the first electronic format.

33. (previously presented) The medium of claim 25, wherein the at least one type of data source comprises heterogeneous relational databases.

34 -75 (cancelled)

76. (new) The method of claim 1, wherein each schema describes a structure of a target format and each annotation relates to a structure of a source format, so that each annotated schema guarantees that the retrieving steps create data that conforms to the target format, without additional checking.

77. (previously presented) The device of claim 13, wherein each schema describes a structure of a target format and each annotation relates to a structure of a source format, so that each annotated schema guarantees that the retrieving steps create data that conforms to the target format, without additional checking.

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78. (previously presented) The medium of claim 25, wherein each schema describes a structure of a target format and each annotation relates to a structure of a source format, so that each annotated schema guarantees that the retrieving steps create data that conforms to the target format, without additional checking.

79 -82 (cancelled)

83. (previously presented) The method of claim 1, wherein the annotations are inserted into the respective schema.

84. (previously presented) The device of claim 13, wherein each annotated schema comprises a schema with inserted annotations.

85. (previously presented) The medium of claim 25, wherein each annotated schema comprises a schema with inserted annotations.